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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/494,282	01/18/00	SELIFONOV	S 02-028930US

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EXAMINER

ZHOU, S

ART UNIT	PAPER NUMBER
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1631

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DATE MAILED: 12/07/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/494,282	Applicant(s) SELIFONOV ET AL.	
	Examiner Shubo "Joe" Zhou	Art Unit 1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply
 A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status
 1) ☐ Responsive to communication(s) filed on _____.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims
 4) ☒ Claim(s) 1-88 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☐ Claim(s) _____ is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☒ Claims 1-88 are subject to restriction and/or election requirement.

Application Papers
 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119
 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
 1. ☐ received.
 2. ☐ received in Application No. (Series Code / Serial Number) _____.
 3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)
 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 20) ☐ Other: _____

The art unit designated for this application has changed. Applicant(s) are hereby informed that future correspondence should be directed to Art Unit 1631.

Restriction/Election Requirement

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. Claims 1-42, drawn to methods for making recombinant nucleic acids, classified in Class 435, subclass 91.52. If this group is elected, then the below summarized added specie election is also required.
- II. Claims 43-53, drawn to methods of making character strings and a library of recombinant nucleic acids made thereby, classified in Class 435, subclass 91.2 and Class 536, subclass 23.1.
- III. Claims 54-57, drawn to methods of facilitating recombination between two or more divergent nucleic acids and product made thereby, classified in Class 435, subclass 440.
- IV. Claims 58-61, drawn to methods of generating and recombining nucleic acids, classified in Class 435, subclass 91.1.
- V. Claims 62-70, drawn to methods of optimizing activity of a nucleic acid, classified in Class 435, subclass 6. If this group is elected, then the below summarized added specie election is also required.
- VI. Claims 71-77, drawn to methods of providing a library of recombinant nucleic acids which is enriched for a sequence of interest, classified in Class 435, subclass 91.5. If this group is elected, then the below summarized added specie election is also required.

VII. Claims 78-83, drawn to methods of generating a library of biological polymers, classified in Class 436, subclass 536, and Class 435, subclass 69.1. If this group is elected, then the below summarized added specie election is also required.

VIII. Claims 84-88, drawn to an integrated system, classified in Class 702, subclass 19. If this group is elected, then the below summarized added specie election is also required.

The inventions are distinct, each from the other because of the following reasons:

The inventions of Groups (I-VII) and Group VIII are independent inventions because they are directed to patentably distinct subject matter regarding the critical limitations therein. For Groups (I-VII), the critical feature is nucleic acids; for Group VIII, the critical feature is an integrated system.

Each of Groups (I-VII) is directed to a separate and distinct invention. Group I is directed to methods for making recombinant nucleic acids, Group II is directed to methods of making character strings, Group III is directed to methods of facilitating recombination between two or more divergent nucleic acids, Group IV is directed to methods of generating and recombining nucleic acids, Group V is directed to methods of optimizing the activity of a nucleic acid, Group VI is directed to methods of providing a library of recombinant nucleic acids which is enriched for a sequence of interest, Group VII is directed to methods of generating a library of biological polymers. These methods are distinct both physically and functionally, require different process steps, reagents and parameters, and produce different products. Consequently, these inventions have acquired a separate status in the art as a separate subject for inventive effect and are usually published separately. The search for each of the above inventions is not co-extensive particularly with regard to the literature search. Further, a reference which

would anticipate the invention of ^{any}~~any~~ one Group would not necessarily anticipate or make obvious the any of the other groups.

Additional Specie election only regarding an election of Group I, V, VI, VII and VIII above:

It is noted that some claims in the instant application contain multiple species of inventions which require restriction/election.

Claim 6 of Group I is directed to a method of making a recombinant nucleic acid, said method having limitation selected from a group of genetic operators of 14 kinds: starting from page 81, line 26, "a mutation of..." to page 82, line 12, "death of...". This list of genetic operators are considered as species subject matter. These different genetic operators are usually published separately and require different searches. Applicant is required to elect only one species for the claimed invention of Claim 6 in Group I, from the group of 14 species listed above (designated as by the Examiner Species 6-1 ("a mutation of..." on page 81, line 26) through Species 6-14 ("death of..." on page 82, line 12) for the purpose of examination.

Similarly, Claim 88 is directed to an integrated system having limitation selected from a group of genetic operators of 13 kinds: starting from page 93, line 22, "a mutation", to line 26 of the same page, "death". For the same reasons stated above, applicant is required to elect only one species for the claimed invention of Claim 88 in Group VIII, from the group of 13 species listed above (designated as by the Examiner Species 88-1 ("a mutation") through Species 88-13 ("death") for the purpose of examination.

Claim 62 of Group V is directed to method of optimizing activity of a nucleic acid, containing limitations including both nucleic acid and protein, two distinct chemical groups. Applicant is required to elect only one species, either Species 62-1 (nucleic acid) or Species 62-2 (protein) for the purpose of examination.

Claim 74 of Group VI is directed to method of providing a library of recombinant nucleic acids, containing limitations including both a column matrix material and a nucleic acid chip, two distinct species both chemically and physically. Applicant is required to elect only one species, either 74-1 (column matrix material) or 74-2 (nucleic acid chip) for the purpose of examination.

Claim 80 of Group VII is directed to method of generating a library of biological polymers, containing limitations including nucleic acids, polypeptides and peptide nucleic acids, three distinct species. Applicant is required to elect only one species, either 80-1 (nucleic acid), or 80-2 (polypeptide) or 80-3 (peptide nucleic acid) for the purpose of examination.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR § 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one

claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).


Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703)305-3014.

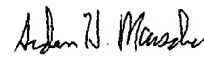
Any inquiry concerning this communication or earlier communications from the examiner should be directed to:

Shubo "Joe" Zhou, Ph.D., whose telephone number is (703) 605-1158. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Patent Analyst Tina Plunkett whose telephone number is 703)-305-3524, or to the Technical Center receptionist whose telephone number is (703) 308-0196.

S. "Joe" Zhou: sjz 


ARDIN H. MARSCHEL
PRIMARY EXAMINER

December 4, 2000